

# Strictly-Shell Man Converts

by Mary James

**W**hole-house contracting holds no mysteries for Richard Kornbluth, president and cofounder, with Frank LaSala, of EnTherm, Incorporated, in Syracuse, New York. The first time he got his hands on a blower door was in 1982. To say it was a life-changing event would be a slight exaggeration—a creeping conversion would be more accurate. It took almost a decade for him to fully incorporate blower door testing into his insulation and air sealing business. By 1992 the conversion was complete, and Kornbluth was training other contractors to use a blower door to document air leakage reductions. Performance testing has been a mainstay of his business ever since. So in early 2001, when the New York State Energy Research and Development Authority (NYSERDA) and EPA were getting ready to roll out a program to improve the efficiency of existing housing in New York State and were looking for contracting businesses to enroll in the program, Kornbluth's EnTherm was an



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obvious fit. Obvious as it was, the involvement has dramatically altered Kornbluth's business. "Since 2001, our volume of business has grown by 50%," says Kornbluth.

Home Performance with Energy Star, EPA's energy efficiency program tailored for existing housing, has now debuted in five states (see "Home Performance Expands Across Country").

## Home Performance Expands Across Country

Three years ago, NYSERDA and the EPA launched Home Performance with Energy Star, a whole-house improvement program for existing homes, in New York (see "Energy Star Takes On Home Performance," *HE* Sept/Oct '01, p. 39). NYSERDA's start was followed by programs in Wisconsin; Massachusetts; Kansas City, Missouri; and Fresno and San Jose, California. The successes and lessons learned in these programs have attracted growing interest and participation, not only from program implementers around the country, but also from other federal agencies and departments.

Last year the DOE awarded grants to five states to help jump-start regional Home Performance with Energy Star efforts within each state. At this writing, the program is getting under way in Austin, Texas, under the leadership of Austin Energy. The Missouri Energy Center is working not only to support the work already under way in Kansas City, but also to launch a new effort in St. Louis in partnership with the Gateway Center. Southface Energy Institute is putting together a program to serve the Atlanta area and should be training contractors by press time. The Idaho Energy Division is working with a

variety of stakeholders in Boise. And New Jersey is not only using the DOE grant to start a program in Atlantic City, but is also exploring a broader effort within the state.

Even without the assistance of a DOE grant, Efficiency Vermont (EVT) is getting ready to launch Home Performance with Energy Star in that state. EVT, like several other sponsors, is using Building Performance Institute contractor certifications as a cornerstone of the initiative. They are also leveraging the award-winning promotion of Energy Star on a variety of levels, including lighting, appliances, and

Although the program takes shape differently in each area, its basic approach and goals are consistent across the country. Home Performance with Energy Star emphasizes training contractors to offer whole-house assessments of a home's comfort and energy problems, as well as the solutions to those problems. Kornbluth was contacted by Conservation Services Group, the implementer of the New York program, because his company had a track record in performance-testing their work. "I owned two blower doors and an infrared scanner," says Kornbluth. "But we did strictly shell work."

Becoming a Home Performance with Energy Star contractor in New York State requires getting certified by the Building Performance Institute (BPI). Kornbluth is currently certified by BPI as a Building Analyst I Specialist, a Shell Specialist, and a Mobile Homes Specialist. Besides himself, EnTherm has seven BPI Building Analyst I Specialists on staff. Of these seven, three are also BPI Shell Specialists and two of the three Shell Specialists are also BPI Heating Specialists. The shell training, which Kornbluth conducts for his staff, covers the concept of the



Joe Ilacqua blows cellulose into an exterior wall.

house as a system; the transport of heat, air, and moisture in buildings; driving forces; combustion basics; building construction; insulation, ventilation, and thermal bypasses; health and safety testing procedures, including draft, worst-case depressurization, and CO testing

protocols; blower door testing; and duct leakage testing.

Today, Kornbluth's business model has changed from strictly shell work to offering customers whole-house solutions to their home performance problems (see "One Good Turn"). Now, when a customer calls EnTherm with a specific complaint, such as "I need more insulation in my walls" or "I want to replace my windows," the response is that the company will send out a building performance estimator to look at the whole house. "All my estimators make a strong effort to talk about houses as a system," says Kornbluth. "They try to get the customer to understand that if you insulate a house, you can change how that house works." If a customer is sufficiently interested, EnTherm will return and conduct a full energy audit for a \$150 fee. EnTherm will credit that fee back to the customer, should he or she sign up

for any work. Finally, so as not to leave a worried customer behind, the estimator tackles the financial fear factor by outlining the financing that exists to pay for home performance work.

To utility customers in New York State, Home Performance with Energy

Star-labeled homes, to crack the existing-homes market. Illinois, Texas, and Minnesota, among others, are exploring developing Home Performance with Energy Star programs in their states.

Joining EPA and DOE, HUD has also provided funding to help develop a contractor infrastructure, promote high-quality installations in the field, and explore how the approaches in one- and two-family homes can be applied to multifamily buildings. This partnership at the federal level will provide a boost for the local efforts. And meetings with participants from around the country, such as those held at EEBA in the fall and at Affordable Comfort

in the spring, are giving everyone a chance to learn from one another.

Ultimately, the success of Home Performance with Energy Star rests on the shoulders of the local participants—from the state, utility, and other organization sponsors to the participating contractors themselves. And it's from their work that we'll learn the results of innovative approaches. Over the next year, we will refine our knowledge of how contractors can best retool their businesses; we're already seeing it happen in New York, Wisconsin, California, and Kansas City. We'll see increased discussions of standards and certifications. We'll learn how innovative educational and

marketing approaches, such as the recently launched Home Energy Doctor radio show in Kansas, can help transform the local market. We'll see how further training can help contractors not only with their technical skills, but also with ways to make a living providing value-added services to homeowners. The market is ripening, and it's not a moment too soon.

—Mike Rogers

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Star offers, through NYSEDA, three financing incentives. Low-interest loans—currently at 5.99%—are available to cover the cost of the contracting work. People who qualify on the basis of income can get a 50% incentive—up to \$5,000—to pay for home performance work. Finally, those who can afford to pay for improvements, and choose not to use the financing, are eligible for a cash incentive equal to 10% of the project's cost.

Kornbluth attributes his 50% increase in business primarily to the availability of these financing programs. The competitive financing packages are attractive to new customers not only because they lower the cost of getting the work done, but



Chris Peters sets up for a blower door test.

also because they simplify the process. In one visit, Kornbluth's estimators can identify solutions to a customer's comfort and energy problems and help a customer to figure out how to pay for the necessary work. From Kornbluth's

perspective, the financing has enabled him to sell complete—and therefore more effective—home performance packages that include insulation and air sealing, windows and doors, and HVAC improvements. Expanding their service offerings to include HVAC work has given them an additional profit center. "The average size of our jobs has increased substantially," says Kornbluth.

To address his customers' HVAC needs in a timely manner, Kornbluth has actively striven to establish contracting relationships with several HVAC shops—a challenging task. To work with him, an HVAC contractor needs to be willing to be trained to take a house-as-a-system approach to furnace repair and replacement and to

## One Good Turn

Standing in her bedroom, Laurie Schumacher could almost tell you which way the winter winds were blowing. Last spring, she finally decided that enough was enough. It was time to replace those drafty windows. So she picked up the phone and called EnTherm, a company that a trusted friend had recommended. "We had heard how well EnTherm had worked, so we didn't even call other contractors," says Schumacher.

EnTherm's estimator arrived at the Schumachers house, armed with a blower door and an infrared (IR) camera. Drafty windows might be the reason the Schumachers had called, but replacing them wasn't necessarily the solution to restoring comfort in their house. After conducting a blower door test and an IR scan to find out where the largest leaks were located, the EnTherm technician determined that the windows were indeed drafty, but so was the thin layer of attic insulation.

EnTherm technicians air sealed the attic, including a pocket door frame that blower door testing had indicated was extremely leaky, and upgraded the attic insulation to R-41 by blowing in cellulose insulation. They replaced windows in the



After EnTherm air-sealed the attic, upgraded the insulation there, replaced windows, and made a few other minor improvements, the Schumachers were comfortably warm throughout this last winter.

bedrooms and the dining room. In the living room, they added a window film to reduce damage to the furniture caused by UV light. They removed electric heaters from two rooms that been heated separately and added new gas-fired units.

Laurie Schumacher now waxes enthusiastic over how comfortable her home is. "The difference between last winter and

this winter has been remarkable," she says. "This winter we got hot inside," she adds almost reverently. All that indoor comfort has not come at an ongoing price; her total utility bills have dropped noticeably. Will she in turn be a source of referrals for EnTherm? No doubt about it. "They did a great job," says Schumacher. "And they were very nice people."

get certified by BPI. Kornbluth talked to his customers and to HVAC equipment suppliers to identify potential subcontractors. He now has good subcontracting relationships with three small HVAC companies; he finds that the smaller, one- to three-person shops tend to be more flexible in their approach. Kornbluth's approach to maintaining good working relationships no doubt helps. "Our policy with subcontractors is, they get a bill in on Wednesday, we get a check to them on Friday," he says.

EnTherm's business has also gotten a boost from the Home Performance with Energy Star program's marketing efforts, particularly when these efforts were targeted in the Syracuse area. "The use of This Old House's Steve Thomas as a spokesperson helped significantly," says Kornbluth (see "Performance Comes Home for Steve Thomas," *HE* Nov/Dec '01, p. 43). EnTherm has also used NYSERDA's brochures and videotapes as selling tools, which has been somewhat helpful.

Kornbluth's relationship with Home Performance with Energy Star may be rosy, but he cautions that there is a downside. Successful whole-house contracting requires more management; it means coordinating different trades to perform the insulation, windows and doors, and HVAC components of a job. And then there is the dreaded p-word. "Any contractor who is interested in participating in New York's program must be prepared for the required paperwork," Kornbluth warns. "Pre- and postaudits have to be posted in Home-check or TREAT software, worksopes have to be submitted for approval by NYSERDA, and completion certificates have to be signed by customers and submitted to NYSERDA." Jobs that qualify for a NYSERDA consumer incentive



Chris Peters, a certified Heating Specialist, conducts a combustion safety test.



An EnTherm technician, Bob Thatcher, checks a porch ceiling for bypasses.

require more paperwork, but this cost is balanced by a NYSERDA contractor audit incentive for every job submitted. This audit incentive is 5% of the total contracted work, up to a maximum of \$10,000.

Paperwork is not the only drawback. As a BPI-certified contractor, Kornbluth cannot take on a job if the customer

refuses to address health and safety concerns. "We have had customers with unvented gas fireplaces who have refused to disconnect them to have shell work done, or who have refused to install kitchen exhaust fans when their ovens made more than 50 ppm of CO," he says. He knows that these customers will find other contractors who will limit the scope of their work to just adding insulation or just replacing windows. Still, the benefits of participating in Home Performance with Energy Star and conducting thorough whole-house retrofits far outweigh the disadvantages. "We know that we are not leaving houses and their occupants in unsafe or unhealthy conditions. There is a clear peace-of-mind factor here," Kornbluth says.

That peace of mind is clearly being felt by EnTherm's customers; 40%-50% of their new business comes from customer referrals. They also use media advertising, including truck signs and some TV and radio spots. In an innovative twist, Kornbluth somewhat sheepishly admits to using very targeted telemarketing. EnTherm will call homes around existing job sites to explain to the residents the type of work that is being performed and to ask whether they have any comfort or performance complaints.

Kornbluth says his biggest challenge, with his increased work volume, is hiring qualified employees. His training skills have gotten an extended workout lately as he transforms his new hires into the kind of employees who will leave a satisfied customer in a well-performing house. Could Kornbluth ever see his company going back to the old ways of strictly blow-and-go installation jobs? No, he says, those days belong to the past—at least one conversion ago.

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